# Moodys Corporation (MCO)

**$258.98** (As of 10/27/20)

Price Target (6-12 Months): **$279.00**

| | | |
|---|---|---|
| Long Term: 6-12 Months | **Zacks Recommendation:** (Since: 11/18/19) Prior Recommendation: Outperform | **Neutral** |
| Short Term: 1-3 Months | **Zacks Rank:** (1-5) | **2-Buy** |
| | Zacks Style Scores: | VGM:C |
| | Value: F \| Growth: B \| Momentum: B | |

## Summary

Shares of Moody's have outperformed the industry in the past year. Its earnings have outpaced the Zacks Consensus Estimate in each of the trailing four quarters. Earnings estimates have been going up ahead of its third quarter 2020 results. It remains well poised for growth on the back of the dominant position in the credit rating industry and strong balance sheet position. Inorganic growth strategy is expected to help in further diversifying revenue sources. However, volatility and a challenging macro-economic environment will likely hamper the company's financials to an extent. Persistently mounting costs, mainly owing to investments in franchise and acquisitions, will likely hurt bottom line to some extent. Stiff competition is expected to put pressure on pricing, which in turn might hamper the company's financials in the long run.

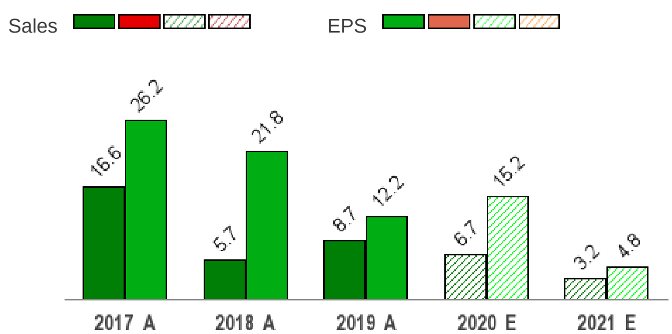
## Price, Consensus & Surprise


*Source: Zacks Investment Research*

## Data Overview

| | |
|---|---|
| 52-Week High-Low | **$305.96 - $164.19** |
| 20-Day Average Volume (Shares) | **555,019** |
| Market Cap | **$50.0 B** |
| Year-To-Date Price Change | **12.1%** |
| Beta | **1.12** |
| Dividend / Dividend Yield | **$2.24 / 0.8%** |
| Industry | **Financial - Miscellaneous Services** |
| Zacks Industry Rank | **Bottom 33% (171 out of 254)** |
| Last EPS Surprise | **24.3%** |
| Last Sales Surprise | **13.0%** |
| EPS F1 Estimate 4-Week Change | **3.4%** |
| Expected Report Date | **10/29/2020** |
| Earnings ESP | **1.9%** |
| P/E TTM | **27.5** |
| P/E F1 | **27.1** |
| PEG F1 | **2.1** |
| P/S TTM | **9.6** |

## Sales and EPS Growth Rates (Y/Y %)




## Sales Estimates (millions of $)

| | Q1 | Q2 | Q3 | Q4 | Annual* |
|---|---|---|---|---|---|
| 2021 | 1,278 E | 1,349 E | 1,366 E | 1,326 E | 5,316 E |
| 2020 | 1,290 A | 1,435 A | 1,248 E | 1,173 E | 5,151 E |
| 2019 | 1,142 A | 1,214 A | 1,241 A | 1,233 A | 4,829 A |

## EPS Estimates

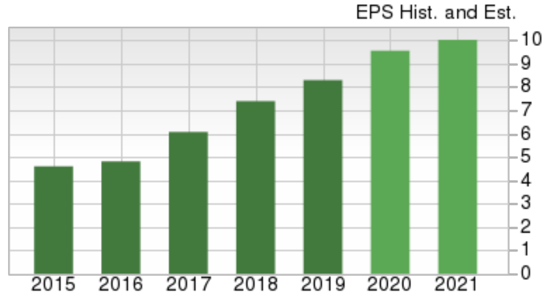
| | Q1 | Q2 | Q3 | Q4 | Annual* |
|---|---|---|---|---|---|
| 2021 | $2.50 E | $2.54 E | $2.55 E | $2.41 E | $10.01 E |
| 2020 | $2.73 A | $2.81 A | $2.19 E | $1.86 E | $9.55 E |
| 2019 | $2.07 A | $2.07 A | $2.15 A | $2.00 A | $8.29 A |

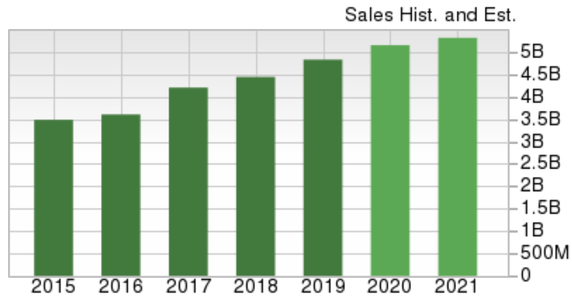
*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 10/27/2020. The reports text is as of 10/28/2020.

## Overview

Moody's  Corporation is a leading provider of credit ratings, research, data & analytical tools, software solutions & related risk management services, quantitative credit assessment services, credit training services and credit process software to banks and other financial institutions.




Moody's reports its businesses under the following two operating divisions:

- ***Moody's Investors Service*** (MIS) (representing 58.4% of revenues in 2019) provides credit ratings and research covering debt instruments and securities. Revenues from MIS comprises ratings revenues from Structured Finance; Corporate Finance; Financial Institutions; and Public, Project and Infrastructure Finance.

- ***Moody's Analytics*** (MA) (41.6%) offers solutions related to financial and risk management activities of institutions. Within its Enterprise Risk Solutions, MA provides risk management software solutions and related services. Research, Data & Analytics provides investor-oriented research and data, including in-depth research on major debt issuers and industry studies.

Over the years, Moody's  made several notable acquisitions including Wall Street Analytics (2006), Fermat International (2008), Copal Partners (2011), Barrie & Hibbert (2011), Amba Investment Services (2013), ICRA Ltd. (2014) and Equilibrium (2015). In 2016, the company acquired Korea Investors Service as well as a prominent actuarial software company, GGY.

In 2017, Moody's  acquired the structured finance data and analytics business of Frankfurt-based SCDM and Amsterdam, Netherlands-based Bureau van Dijk. In 2018, the company acquired Omega Performance and Reis Inc. In 2019, it acquired ABS Suite from Deloitte & Touche LLP and RiskFirst. In 2020, the company acquired Regulatory DataCorp and London-based RBA International and Acquire Media.

Moody's divested the Analytics Knowledge Services business to Equistone in 2019.


*Source: Zacks Investment Research*

## Reasons To Buy:

Moody's is well positioned for growth on the back of its dominant position in the credit rating industry, constant efforts to diversify the revenue base and synergies from strategic acquisitions.

- Moody's is pursuing growth in areas outside the core credit ratings service. The company has increased exposure to banking and insurance industries, and is diversifying into the emerging and fast-growing professional services and enterprise risk solutions sectors. Also, a rising share of the analytics business, which is not correlated with the volatility of interest rates, has added stability to top-line growth. Total revenues witnessed a five-year (2015-2019) compounded annual growth rate (CAGR) of 8.5%, with the momentum continuing in first-half 2020. Improved mix and lower-risk nature of the product portfolio will likely boost the company's revenues.
- As of Jun 30, 2020, Moody's had total debt worth $6.3 billion, an undrawn revolving credit facility of $1 billion, and cash and cash equivalents of $2.1 billion. The company has nominal debt maturities through 2021. Also, its times-interest earned — which was 11.7 at second quarter-end — has been improving over the last several quarters. These imply that the company will likely be able to meet near-term debt obligations even if the economic situation worsens.
- Moody's grew meaningfully over the years through several strategic acquisitions, which provided it with increased scale and cross-selling opportunities across products and vertical markets. In 2020, the company purchased Acquire Media, Regulatory DataCorp, London-based RBA International and a minority stake in Malaysian Rating Corporation Berhad. Last year as well, it undertook inorganic expansion initiatives. These efforts are expected to help it diversify revenues and be accretive to the company's earnings, going forward. It will continue to pursue opportunistic deals that are strategic fit and will complement the existing operations.
- Moody's capital deployments remain decent. In February 2020, the company announced a 12% hike in quarterly dividend. Also, the company had a share repurchase authorization in place, which has been suspended in response to the coronavirus pandemic. Driven by earnings strength and a strong balance sheet position, it will likely be able to sustain the current capital deployments.
- Shares of Moody's have outperformed the industry so far this year. Moreover, the company's earnings estimates for 2020 have moved 3.4% upward over the past 30 days. Therefore, given the strong fundamentals and positive estimate revisions, its impressive price performance is expected to continue.

## Reasons To Sell:

Persistent increase in expenses and a challenging operating backdrop are expected to hurt Moody's financials. Also, stiff competition across the credit rating industry is a key near-term concern.

- Elevated operating expenses remain a major concern for Moody's. Operating expenses witnessed a five-year (2015-2019) CAGR of 9.2%, mainly due to rise in operating and SG&A costs. The uptrend persisted in the first six months of 2020. Expenses are expected to remain elevated as the company continues to invest in franchise and grow inorganically. Further, it is undertaking a restructuring plan, which is likely to result in some charges in the second half of the year. Additionally, credit rating agencies including Moody's are subject to increased regulatory scrutiny since the 2008 financial crisis. These increase costs related to compliance and governance, thus leading to further rise in expenses.

- Moody's faces stiff competition in most of the markets in which it operates. In the credit rating sector, the company faces competition from Fitch, S&P Ratings Services, Morningstar and many other regional providers. In the analytics segment, it faces competition from Dun & Bradstreet, Bloomberg, IBM, Fiserv and many others. In the risk management software market, the company competes with large software developers including SAS, Oracle, IBM and Mysis. Stiff competition will likely continue to put pressure on pricing that may hurt profitability.

- Further, Moody's seems overvalued compared with the broader industry. Its current price/book and price/earnings (F1) ratios are above the respective industry averages.

## Last Earnings Report

### Moody's Beats on Q2 Earnings, Revenues Up Y/Y

| Quarter Ending | 06/2020 |
|---|---|
| Report Date | Jul 30, 2020 |
| Sales Surprise | 13.03% |
| EPS Surprise | 24.34% |
| Quarterly EPS | 2.81 |
| Annual EPS (TTM) | 9.69 |

Moody's reported second-quarter 2020 adjusted earnings of $2.81 per share, which outpaced the Zacks Consensus Estimate of $2.26. Also, the figure improved 36% from the year-ago quarter.

Revenue growth on the back of impressive global bond issuance volume largely drove the results. Further, operating expenses declined slightly.

After taking into consideration certain non-recurring items, net income was $509 million or $2.69 per share, up from $311 million or $1.62 per share in the prior-year quarter.

### Revenues Improve, Costs Down

Revenues of $1.44 billion beat the Zacks Consensus Estimate of $1.27 billion. Also, the top line grew 18% year over year. Foreign currency translation unfavorably impacted the top line by 1%.

Total expenses were $725 million, down 1% year over year. The fall was driven by prudent expense management. Also, foreign currency translation favorably impacted operating expenses by 1%.

Adjusted operating income of $766 million increased 28% year over year. Adjusted operating margin was 53.4%, up from 49.3% a year ago.

### Impressive Segment Performance

***Moody's Investors Service*** revenues grew 27% year over year to $938 million, attributable to rise in issuance activity. Foreign currency translation unfavorably impacted the segment's revenues by 1%.

Corporate finance revenues increased from the prior-year period, driven by robust investment grade bond issuances. Also, financial institutions' revenues grew year over year, primarily backed by a rise in activities from U.S. banks and insurance companies.

Further, public, project and infrastructure finance revenues increased from the year-ago level, reflecting strong U.S. public finance issuance, as well as solid infrastructure issuance. However, structured finance revenues fell from the prior-year figure, mainly due to lower global collateralized loan obligation activity and weakness within U.S. CMBS.

***Moody's Analytics*** revenues grew 5% year over year to $497 million. Foreign currency translation unfavorably impacted the segment's revenues by 2%.

The segment recorded growth in research, data and analytics revenues, as well as Enterprise Risk Solutions revenues.

### Strong Balance Sheet

As of Jun 30, 2020, Moody's had total cash, cash equivalents and short-term investments of $2.2 billion, up from $1.9 billion on Dec 31, 2019. Further, it had $6.3 billion of outstanding debt and $1 billion in additional borrowing capacity under the revolving credit facility.

### 2020 Guidance Raised

Given impressive second-quarter results, Moody's has raised its 2020 earnings guidance. The company now expects adjusted earnings in the range of $8.80-$9.20 per share (up from the prior expectation of $7.80-$8.40). On a GAAP basis, earnings are expected within $8.15-$8.55 per share, up from the earlier guided range of $7.25-$7.85.

Moody's now projects revenues to increase in the low-single-digit percent range versus the prior guidance of revenue decline in the band of mid-single-digit percent.

Operating expenses are expected to remain relatively stable year over year versus the prior guidance of a decrease in the mid-single-digit percent range.

The company plans to undertake a restructuring program in second-half 2020, with aim of rationalizing and exiting certain real estate leases. This is expected to result in total pre-tax charges of $25-$35 million and annualized savings of $5-$6 million.

The company expects net interest expenses in the range of $180-200 million.

Adjusted operating margin is expected in the band of 48-49% (versus the prior guided range of 46-48%) and operating margin is likely to be within 43-44% (reflecting a rise from earlier expectation of 41-43%).

Moody's expects cash flow from operations in the $1.6-$1.8 billion band (up from the $1.3-$1.5 billion range) and free cash flow within $1.5-$1.7 billion (higher than $1.2-$1.4 billion projected earlier).

Effective tax rate is likely to be in the 19.5-21.5% range.

### Segment Outlook for 2020

The ***MIS segment*** revenues are likely to grow in the low-single-digit percent range versus prior view of a decrease in the high-single-digit percent range. The key reason behind the improved guidance is the assumption that the segment's global rated issuance will increase in the low-double-digit percent range.

Adjusted operating margin is expected to be approximately 58%, higher than the prior guided range of 55-57%.

Coming to the ***MA segment***, Moody's anticipates revenues to grow in the mid-single-digit percent range. Adjusted operating margin is expected to be 30%.

## Recent News

**Moody's Buys Acquire Media, Further Diversifying Revenues – Oct 21, 2020**

Moody's has purchased Acquire Media (AM), an aggregator and distributor of curated real-time news, multimedia, data, and alerts, from Naviga, Inc. The financial terms of the deal, which was funded with cash on hand, has not been disclosed. Besides, it will have no material impact of the company's 2020 results.

The transaction advances MA segment's position as a leader in Know Your Customer (KYC) solutions by boosting its capabilities to provide early warning and real-time insight to market participants. AM's patented technology platform gets information from over 18,000 global content sources and then distributes curated real-time feeds and alerts to customers.

AM will be integrated into MA's Research, Data & Analytics line of business. The deal complements Moody's acquisition Bureau van Dijk (BvD) and Regulatory DataCorp (RDC). The company will combine AM's real-time content aggregation and distribution infrastructure with BvD's and RDC's information portfolios, datasets, and analytical tools.

Stephen Tulenko, President of MA, said "Acquire Media plays an integral role in the dissemination of real-time news and information," said. "The acquisition bolsters our ability to provide customers with counterparty screening and surveillance, as well as early warning insights to help them make better decisions."

**Moody's Buys Minority Stake in Malaysian Rating Corporation – Aug 11, 2020**

Moody's has acquired a minority stake in Malaysian Rating Corporation Berhad. This will fortify the company's presence in the Malaysian market.

The Kuala Lumpur-based Malaysian Rating Corporation provides credit rating services covering corporates and financial institutions, with major strength in infrastructure and project finance. It also provides economic and fixed-income research, credit risk solutions, sustainability-linked offerings and finance-oriented online training programs.

The move will strengthen Moody's position in Islamic finance as Malaysia has positioned itself as a global hub of the same. Malaysian Rating Corporation is a leader in this space, and has rated the largest corporate sukuk issuance and other noteworthy sukuks. Further, the country is the region's biggest domestic corporate bond market, which is likely to bode well for the company.

Moody's investment in Malaysian Rating Corporation is in line with its cross-border ratings and research coverage in Malaysia, along with its market outreach activities. The deal has been funded with cash on hand and is unlikely to have any material impact on the company's results for the year.

Notably, Malaysian Rating Corporation will remain separate from Moody's Investor Services and continue functioning as an independent entity.

**Dividend Update**

On Jul 28, Moody's announced a quarterly cash dividend of 56 cents per share. The dividend was paid out on Sep 10 to shareholders of record as of Aug 20.

## Valuation

Shares of Moody's  are up 12.1% in the year-to-date period and 20.8% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Finance sector are down 15.7% and 16.9% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are down 12.7% and 13.3%, respectively.

The S&P 500 index is up 5.2% in the year-to-date period and 11.8% in the past year.

The stock is currently trading at 27.37X forward 12 months earnings, which compares to 11.87X for the Zacks sub-industry, 15.45X for the Zacks sector and 21.75X for the S&P 500 index.

Over the past five years, the stock has traded as high as 33.04X and as low as 16.04X, with a 5-year median of 21.68X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our $279 price target reflects 28.69X forward earnings.

The table below shows summary valuation data for MCO

**Valuation Multiples - MCO**

| | | Stock | Sub-Industry | Sector | S&P 500 |
|---|---|---|---|---|---|
| P/E F12M | Current | 27.37 | 11.87 | 15.45 | 21.75 |
| | 5-Year High | 33.04 | 14.21 | 16.73 | 23.47 |
| | 5-Year Low | 16.04 | 8.75 | 11.59 | 15.27 |
| | 5-Year Median | 21.68 | 11.66 | 14.4 | 17.68 |
| P/CF | Current | 27.08 | 7.1 | 7.4 | 17.37 |
| | 5-Year High | 49.86 | 8.3 | 112.5 | 23.78 |
| | 5-Year Low | 13.62 | 2.28 | 6.97 | 12.9 |
| | 5-Year Median | 23.97 | 5.89 | 19.49 | 18.32 |
| P/S F12M | Current | 9.65 | 1.54 | 6.14 | 4.03 |
| | 5-Year High | 11.11 | 1.79 | 6.66 | 4.31 |
| | 5-Year Low | 4.22 | 1.03 | 4.96 | 3.18 |
| | 5-Year Median | 6.45 | 1.33 | 6.05 | 3.67 |

*As of 10/27/2020* *Source: Zacks Investment Research*

## Industry Analysis **Zacks Industry Rank:** Bottom 33% (171 out of 254)


*Source: Zacks Investment Research*

## Top Peers

| Company (Ticker) | Rec | Rank |
|---|---|---|
| TransUnion **(TRU)** | Outperform | 2 |
| Equifax, Inc. **(EFX)** | Neutral | 3 |
| FactSet Research Systems Inc. **(FDS)** | Neutral | 3 |
| Intercorp Financial Services Inc. **(IFS)** | Neutral | 4 |
| IHS Markit Ltd. **(INFO)** | Neutral | 3 |
| MSCI Inc **(MSCI)** | Neutral | 3 |
| SP Global Inc. **(SPGI)** | Neutral | 2 |
| Verisk Analytics, Inc. **(VRSK)** | Neutral | 3 |

*The positions listed should not be deemed a recommendation to buy, hold or sell.*

## Industry Comparison Industry: Financial - Miscellaneous Services

| | MCO | X Industry | S&P 500 | Industry Peers: MSCI | SPGI | TRU |
|---|---|---|---|---|---|---|
| **Zacks Recommendation (Long Term)** | Neutral | - | - | Neutral | Neutral | Outperform |
| **Zacks Rank (Short Term)** | 2 | - | - | 3 | 2 | 2 |
| **VGM Score** | C | - | - | B | C | B |
| Market Cap | 49.96 B | 288.77 M | 23.55 B | 29.85 B | 79.73 B | 15.32 B |
| # of Analysts | 7 | 2.5 | 13 | 5 | 7 | 11 |
| Dividend Yield | 0.84% | 0.00% | 1.68% | 0.87% | 0.81% | 0.37% |
| **Value Score** | F | - | - | D | D | C |
| Cash/Price | 0.04 | 0.41 | 0.07 | 0.05 | 0.03 | 0.03 |
| EV/EBITDA | 24.39 | 3.48 | 13.09 | 38.13 | 24.36 | 18.80 |
| PEG F1 | 2.10 | 2.79 | 2.67 | NA | 2.96 | 1.91 |
| P/B | 40.56 | 1.08 | 3.35 | NA | 160.11 | 6.85 |
| P/CF | 28.11 | 8.85 | 12.78 | 47.66 | 31.56 | 17.68 |
| P/E F1 | 27.12 | 14.85 | 20.70 | 48.52 | 29.63 | 27.53 |
| P/S TTM | 9.61 | 1.72 | 2.55 | 18.00 | 10.91 | 5.67 |
| Earnings Yield | 3.59% | 5.69% | 4.54% | 2.06% | 3.38% | 3.64% |
| Debt/Equity | 5.14 | 0.40 | 0.70 | -10.82 | 8.25 | 1.60 |
| Cash Flow ($/share) | 9.47 | 0.62 | 6.92 | 7.49 | 10.48 | 4.56 |
| **Growth Score** | B | - | - | B | B | B |
| Historical EPS Growth (3-5 Years) | 18.30% | 10.69% | 10.10% | 29.04% | 21.75% | 26.35% |
| Projected EPS Growth (F1/F0) | 15.18% | -10.93% | -1.78% | 14.22% | 17.17% | 4.92% |
| Current Cash Flow Growth | 9.81% | 5.63% | 5.49% | 11.37% | 8.40% | 14.29% |
| Historical Cash Flow Growth (3-5 Years) | 12.36% | 12.36% | 8.50% | 14.85% | 16.19% | 19.23% |
| Current Ratio | 2.10 | 1.27 | 1.37 | 2.26 | 1.72 | 1.83 |
| Debt/Capital | 83.72% | 30.79% | 42.02% | NA | 93.00% | 61.50% |
| Net Margin | 33.38% | 8.50% | 10.41% | 34.28% | 33.20% | 12.00% |
| Return on Equity | 207.04% | 7.65% | 14.92% | -258.88% | 1,009.75% | 23.43% |
| Sales/Assets | 0.49 | 0.19 | 0.50 | 0.40 | 0.66 | 0.38 |
| Projected Sales Growth (F1/F0) | 6.66% | 0.00% | -0.46% | 8.20% | 7.68% | 1.33% |
| **Momentum Score** | B | - | - | A | B | B |
| Daily Price Change | -1.04% | 0.00% | -1.23% | 2.10% | -0.81% | -4.47% |
| 1-Week Price Change | -5.94% | 0.00% | 0.01% | -4.12% | -3.08% | -1.35% |
| 4-Week Price Change | -6.84% | 0.87% | 1.76% | 0.24% | -7.32% | -4.75% |
| 12-Week Price Change | -3.55% | 1.12% | 1.86% | -2.04% | -4.32% | -7.83% |
| 52-Week Price Change | 20.78% | -15.52% | -0.11% | 56.49% | 29.13% | -1.43% |
| 20-Day Average Volume (Shares) | 555,019 | 109,909 | 1,803,058 | 394,527 | 849,815 | 999,192 |
| EPS F1 Estimate 1-Week Change | 0.00% | 0.00% | 0.00% | 0.00% | 1.67% | 0.00% |
| EPS F1 Estimate 4-Week Change | 3.36% | 0.00% | 0.28% | 1.15% | 3.25% | 0.50% |
| EPS F1 Estimate 12-Week Change | 9.83% | 2.02% | 3.06% | 1.15% | 3.87% | 1.00% |
| EPS Q1 Estimate Monthly Change | 1.00% | 0.00% | 0.12% | 2.31% | 1.10% | 0.73% |

*Source: Zacks Investment Research*

## Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

## Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

## Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

## Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

| | |
|---|---|
| Value Score | F |
| Growth Score | B |
| Momentum Score | B |
| VGM Score | C |

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

## Disclosures

**This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock.The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page.** Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

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ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

## Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forwardlooking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

**Returns quoted represent past performance which is no guarantee of future results.** Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

## Glossary of Terms and Definitions

**52-Week High-Low:** The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

**20-Day Average Volume (Shares):** The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

**Daily Price Change:** This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

**1-Week Price Change:** This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

**4-Week Price Change:** This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a mediumterm price change metric and an indication of the stock gaining momentum.

**12-Week Price Change:** This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

**52-Week Price Change:** This is the percentage change in a stock’s closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

**Market Cap:** The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

**Year-To-Date Price Change:** Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

**# of Analysts:** Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

**Beta:** A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

**Dividend:** The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

**Dividend Yield:** The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the mostrecent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn’t change frequently, dividend yield usually changes with a stock’s price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

**S&P 500 Index:** The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock’s weight in the index is proportionate to its market value.

**Industry:** One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

**Zacks Industry Rank:** The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

**Last EPS Surprise:** The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

**Last Sales Surprise:** The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

**Expected Report Date:** This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

**Earnings ESP:** The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

**Periods:**

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

**P/E Ratio:** The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

**PEG Ratio:** The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company’s expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

**P/S Ratio:** The price-to-sales ratio is calculated as a company’s current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

**Cash/Price Ratio:** The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company’s current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every $1 investment.

**EV/EBITDA Ratio:** The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company’s enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

**EV/Sales Ratio:** The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

**EV/CF Ratio:** The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company’s cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

**P/CF Ratio:** The price-to-cash flow ratio measures a company’s per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

**P/FCF Ratio:** The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

**Earnings Yield:** The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company’s current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at $35 and expected to earn $3 per share in the current fiscal year (F1), would be 0.0857 (3/35 = 0.0857) or 8.57%. In other words, for $1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors’ dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

**Debt/Equity Ratio:** The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

**Cash Flow ($/share):** Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

**Current Ratio:** The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

**Debt/Capital Ratio:** Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

**Net Margin:** Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every $1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

**Return on Equity:** Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every $1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

**Sales/Assets Ratio:** The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated $2.50 in sales for every $1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

**Historical EPS Growth (3-5 Years):** This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

**Projected EPS Growth (F1/F0):** This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

**Current Cash Flow Growth:** It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

**Historical Cash Flow Growth (3-5 Years):** This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

**Projected Sales Growth (F1/F0):** This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

**EPS F1 Estimate 1-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is $1.10 now versus $1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from $1.00 to 90 cents, that would be a 10% downward revision.

**EPS F1 Estimate 4-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

**EPS F1 Estimate 12-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

**EPS Q1 Estimate Monthly Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.